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# Community Attitudes Toward Complementary, Alternative and Integrative Medicine in North Hartford, Connecticut

Andria Matthews  
[anmatthews@uchc.edu](mailto:anmatthews@uchc.edu)

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Community Attitudes Toward Complementary, Alternative and Integrative Medicine  
in North Hartford, Connecticut

Andria Danielle Matthews

B.A., Yale College, 2004

A Thesis  
Submitted in Partial Fulfillment of the  
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Community Attitudes Toward Complementary, Alternative and Integrative Medicine in North  
Hartford, Connecticut

Presented by

Andria Danielle Matthews, B.A.

Major Advisor\_\_\_\_\_

Jane Ungemack, Dr.P.H.

Associate Advisor\_\_\_\_\_

Mary P. Guerrero, M.D.

Associate Advisor\_\_\_\_\_

Bonnie G. McRee, Ph. D.

University of Connecticut

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## **Abstract**

**Background:** This study explores the attitudes of residents of North Hartford, CT toward Complementary, Alternative and Integrative Medicine.

**Methods:** Twenty-five semi-structured, 10-15 minute in-person interviews were conducted at five sites over a two-week period in March 2019.

**Results:** Few respondents were familiar with the term “Integrative Medicine.” Familiarity with modalities such as massage was higher (92%). Massage therapy was most often tried in the past (56%). Meditation and relaxation and yoga were the most frequently requested offerings. Cost, transportation, time of day and day of week, all emerged as potential barriers to participation. Pain-related complaints were prevalent amongst respondents.

**Conclusions:** The term “Integrative Medicine” was not understood widely in this population. Providing group walks/hikes could help residents feel more comfortable engaging in activities in nature. When offering yoga, accessibility should be emphasized. Offering massage, CAM/Integrative Medicine for weight and pain management could be popular activities for this community.

## Introduction

Currently, there is considerable interest in improving the health of residents of North Hartford, Connecticut, a community that suffers from high rates of poverty, unemployment and morbidity, as well as reduced life expectancy. One such initiative is that of the Keney Park Sustainability Project (KPSP). The KPSP plans to remediate an existing neighborhood building that sits adjacent to Keney Park into a *Wellness and Nature Center*. The intention is to connect residents to Keney Park as well as provide opportunities for residents to partake in Complementary, Alternative, and Integrative Medicine activities. In addition, the KPSP will partner with the University of Connecticut School of Medicine to provide conventional medical care to residents. The National Institutes of Health, National Center for Complementary and Integrative Health (NCCIH) defines Complementary Medicine as a type of non-mainstream practice that is used *in addition* to conventional medicine, while Alternative Medicine is a non-mainstream practice that is used *instead of* conventional medicine (NCCIH, 2019). CAM includes a wide variety of practices, including, but not limited to the use of natural products, deep breathing, yoga, chiropractic manipulation, meditation and massage. Furthermore, according to the NCCIH, Integrative Medicine *combines* conventional and complementary approaches in a holistic, coordinated way (NCCIH, 2019).

The need for initiatives to improve the health and wellbeing of North Hartford residents is well established. North Hartford refers to a 3.1 mile section of Hartford that includes the Clay Arsenal, Northeast and Upper Albany neighborhoods, home to a predominantly African American and Latino population. The poverty rate in the area is 49.35%, in excess of Hartford's overall 33.9% rate of poverty and the state's 10% poverty rate ("North Hartford Promise Zone," n.d.). Among Hartford's 17 neighborhoods, North Hartford ranks highest in obesity,



cardiovascular disease, infant mortality, and infections (“North Hartford Promise Zone Demographics”, n.d.). The current conditions of the neighborhood relate to a combination of factors that have hindered development and access to employment. These include the construction of Interstate 84 which bisected Hartford and cut-off the North Hartford area from downtown and the 1968 race riots that destroyed pre-existing businesses in the neighborhood. More recently, the 2005 closure of the Swift Factory which had employed local residents further impacted the neighborhood (Gosselin, 2011).

The KPSP plans to include meditation/relaxation, herbal medicine, massage, chiropractic services, yoga, and activities in nature among its initial offerings at a new *Wellness and Nature Center*. According to the NCCIH, meditation is a mind and body practice which originated as part of ancient spiritual traditions. As part of the practice, meditators become mindful of their thoughts, feelings and sensations in a nonjudgmental way (NCCIH, 2017). Herbal medicine or phytotherapy refers to the use of plants to treat disease or promote health, and is incorporated into several medical traditions including naturopathic medicine and traditional Chinese medicine (Falzon & Balabanova, 2017). Massage therapy refers to several techniques that focus on manipulation of muscle and soft tissue to release muscle tension (NCCIH, 2017). The NCCIH (2019) defines Chiropractic as a profession in which health care clinicians focus on the structure of the body and its functioning, primarily by performing adjustments to the spine to correct alignment, relieve pain and improving functioning and healing. Yoga, as defined by the NCCIH (2018), is a practice based on ancient Indian philosophy which combines postures, breathing, meditation and relaxation.

It is unknown, however, whether a significant investment in the creation of the *Wellness and Nature Center* will result in enthusiastic utilization of the services of the *Center* by

community residents. In essence, ‘If we build it, will they come?’ This research project will help KPSP understand the current attitudes and beliefs of North Hartford residents toward CAM and Integrative Medicine, informing the KPSP team in shaping its development efforts in a way that responds to the interests and needs of the community it intends to serve. This research will also be useful for communities with similar demographics (low-income, African American and Latino populations) that may be considering the use of CAM and Integrative Medicine in improving the health of their own residents.

### **Specific Aims**

The aim of this research was to explore the attitudes of residents toward CAM and Integrative Medicine in the North Hartford community in order to inform the creation of a *Wellness Center* in their neighborhood that is responsive to community needs. The research questions included:

- Are residents familiar with CAM/Integrative Medicine?
- What forms of CAM/Integrative Medicine have North Hartford residents participated in and want to participate in the future?
- What were their previous experiences with CAM/Integrative Medicine like?
- What barriers to participating in CAM/Integrative Medicine do they anticipate?
- What medical conditions do North Hartford residents report that they feel could be improved through CAM/Integrative Medicine?

## Background

Mr. Herbert Virgo, the Executive Director of KPSP, has envisioned that the *Wellness Center* as offering CAM and Integrative Medicine services will decrease health disparities of North Hartford residents, particularly in the areas of chronic disease and mental health. Across Hartford, disparities in food security, transportation access, chronic disease and mental health have been documented. According to the 2015 Community Health and Wellbeing Survey, 33% of Hartford residents reported not having enough money for food in the past 12 months, compared to 12% of Connecticut residents (DataHaven, 2015). In addition, 58% of Hartford residents had access to a car, in comparison to 85% of Connecticut residents. The same report documented obesity rates in Hartford at 33% compared to Connecticut's rate of 26%. Furthermore, 43% of Hartford residents reported feeling down sometimes or often, compared to 28% of Connecticut residents. (DataHaven, 2015).

Disparities in the utilization of CAM and Integrative Medicine among minorities and individuals with lower levels of educational attainment, compared to whites and individuals with higher education, were documented in the 2012 National Health Interview Survey (Clarke, Black, Stussman, Barnes, Nahin, 2015). Non-Hispanic Whites were most likely to have used CAM or Integrative Medicine therapies in the previous year (37.9%) compared to 22% of Hispanics and 19.3% of non-Hispanic Blacks, and use of CAM/Integrative Medicine was more prevalent among adults with college degrees (42.6%) compared to just 15.6% of adults who did not finish high school. According to the same study, non-vitamin, non-mineral dietary supplements were the most commonly used CAM in 2002, 2007, and 2012, followed by deep-breathing exercises (Clarke et al., 2015). CAM use is also more prevalent among women, and

back pain, neck pain, joint pain and arthritis are the four most common diseases/conditions for which CAM is used among adults (Barnes, Bloom, Nahin, 2007).

KPSP also seeks to lower stress levels among adults and children in North Hartford in an effort to improve health outcomes. Stress has been linked to the development of conditions such as depression, cardiovascular disease, HIV/AIDS, and cancer (Cohen, Janicki-Deverts & Miller, 2007). This occurs through various pathways such as: 1) maladaptive behavioral changes triggered by stress, such as decreased sleep and exercise, and increased smoking and 2) prolonged release of stress hormones which can impact the functioning of various body systems (Cohen, Janicki-Deverts & Miller, 2007).

In children, activation of the stress response system for prolonged periods of time without the buffer of a protective adult relationship can lead to toxic stress (Shonkoff, Garner, Siegel, Dobbins, Earls, Garner et al., 2011). Toxic stress can result from adverse childhood experiences (ACEs) such as parental substance abuse, neglect and parental depression (Shonkoff, et al., 2011). Toxic stress can disrupt healthy brain development in children, especially in the areas of learning and reasoning, resulting in fewer and weaker neural connections in those areas of the brain. ACEs also increase the risk of developmental delays, as well as depression, substance abuse, diabetes and heart disease (Franke, 2014). ACEs are also predictive of high costs stemming from high utilization of healthcare services as an adult (Sterling, S., Chi, F., Weisner, C., Grant, R., Pruzansky, A., Bui, S., et al., 2018).

In addition, alienation from nature is of particular concern to children. “Nature-Deficit Disorder,” coined by Richard Louv in his book, *Last Child in the Woods* (2005), refers to the detrimental effect on the health of children stemming from their increasing lack of exposure to nature.

Stress reduction in adults and children can be achieved through various CAM and IM approaches that have been shown to reduce stress and build resiliency. Practices such as guided imagery, yoga, acupuncture and exposure to nature have been noted in scientific studies to improve mental and physical measures of stress. For example, in a randomized lifestyle intervention, obese Latino adolescents demonstrated significant reductions in sedentary behavior, reduced salivary cortisol, and increased moderate physical activity following exposure to 12 weekly sessions of lifestyle intervention and guided imagery compared to youth who were provided a lifestyle education and a digital storytelling computer program (Weigensberg, Lane, Ávila, Konersman, Ventura, Adam et al., 2014). In a randomized controlled trial, Danish workers on sick leave randomized to Guided Imagery and music therapy, experienced less self-reported stress and decreased cortisol levels in comparison to wait-list controls (Beck, Hansen & Gold, 2015). A randomized control trial of the effect of guided imagery on pregnant African American women in their second trimester also found encouraging results. Women randomized to a 12-week guided imagery intervention showed decreased anxiety, fatigue and perceived stress compared to controls (Jallo, Ruiz, Elswick & French, 2014).

Yoga and Acupuncture, when administered by properly trained practitioners, has been shown to be safe and reduce stress. A meta-analysis of 42 randomized control trials found that yoga reduced markers of stress, such as cortisol levels, blood pressure and heart rate (Pascoe, Thompson & Ski, 2017). A pre-post study, which involved six acupuncture sessions with 12 elderly and 12 young adult patients demonstrated that acupuncture reduced stress, anxiety and depression in both groups (Pavão, Viana, Pillat, Machado & Bauer, 2010).

The *Keney Park Health and Wellness Center* will be situated adjacent to Keney Park, serving as a gateway to its 694-acre Park that will provide the setting for healing nature walks

and hikes. The relevance of access to parks and natural settings for recreation, exercise and relaxation has been demonstrated in several studies, such as Ewert and Chang's (2018) quasi-experimental study showing that visitors to a wilderness site reported significantly lower levels of stress than those visiting an urbanized outdoor setting or indoor exercise facility. And, research using a cross-over experimental design by Beil and Hanes (2013) showed that individuals exposed to natural settings, such as an urban nature reserve vs. built settings such as an outdoor shopping mall, had greater reductions in salivary amylase (a biomarker of stress) as well as self-reported stress.

While these studies demonstrate the general efficacy of various CAM and Integrative Medicine modalities in stress reduction and health promotion, there has been less emphasis in the literature on assessing the appropriateness of CAM and Integrative Medicine approaches to low-income, minority communities. According to Dr. Robert Saper, Director of Integrative Medicine for the Boston Medical Center Department of Family Medicine, there is a lack of research studies on CAM and Integrative Medicine pertaining to poor, minority and less educated persons (Saper, 2016). However, a few studies have reported favorable results in these populations. For example, a pre-post study of the use of Integrative Medical Group Visits (IMGV) with Spanish-speaking Latino patients with chronic pain reported statistically significant reductions in pain, fatigue and depression among participants (Cornelio-Flores, Lestoquoy, Abdallah, DeLoureiro, Lorente, Pardo, et al., 2018). The IMGV intervention included Mindfulness Based Stress Reduction (MBSR), acupressure, self-massage and facilitated discussions about health topics introduced in the group setting. However, the study was small (N=19), had low retention rates, and had no comparison control group. The study authors acknowledged that the results may not

be generalizable (Cornelio-Flores, Lestoquoy, Abdallah, DeLoureiro, Lorente, Pardo, et al., 2018).

Another study of IMGV in an underserved urban medical setting interviewed patients with chronic pain and/or one or more chronic conditions who had attended IMGV visits. Respondents reported “improved self-monitoring, self-regulation, and increased mindfulness,” as well as less pain following IMGV (Dresner, Barnett, Resnick, Laird, Gardiner, 2016, p. 1183). Again, the study had a very low participation rate; only 25% participants who were asked to participate in the interviews did so. The authors acknowledged that the final participants tended to be high attenders and therefore their results may skew positively compared to other participants (Dresner et al., 2016).

Encouragingly, a study which assessed the interest level of inner city veterans to Complementary and Alternative Medicine (CAM) found largely favorable results (Goldstein, Ibrahim, Frankel & Mao, 2015). The authors found that 80% of veterans were interested in CAM. Interest in CAM was strongly associated with African American race, higher levels of education, presence of moderate to severe pain, and expectations of benefit from CAM use. It is also important to note that Veterans Administration (VA) has embraced the Whole Health model, which embraces CAM/Integrative Medicine approaches (VA, 2018).

Burnett-Zeigler, Schuette, Victorson and Wisner (2016) conducted a review of mindfulness-based interventions, such as mindfulness-based stress reduction (MBSR), yoga, meditation and guided imagery, among high-risk disadvantaged populations such as individuals of low SES, African-American and Hispanic populations and incarcerated individuals. They found that mindfulness-based interventions overall led to improvements in physical and mental health, self-care, and quality of life and high completion rates in these populations. Eighteen

studies were included, seven studies pertaining to MBSR and the remainder pertaining to yoga, meditation and guided imagery. Several of the studies did not include control groups. Therefore, although this review provides preliminary evidence that Integrative Medicine approaches are effective and of interest to disadvantaged populations, more rigorous research is needed.

The available research suggests that CAM and Integrative Medicine may be of interest and utility to underserved, urban, Latino and African American communities, such as the residents of North Hartford. However, barriers such as awareness, availability, accessibility and affordability, limit the use of CAM and Integrative Medicine in underserved communities (Saper, 2016). The specific attitudes and beliefs of North Hartford residents and potential barriers to their utilization of CAM and Integrative Medicine programs remain unknown. As demonstrated by the limited number of high quality, published studies, more research is needed in the field. Accordingly, this study is designed to investigate the attitudes and beliefs of North Hartford residents toward CAM and Integrative Medicine, and will add to the nascent body of literature pertaining to CAM and Integrative Medicine among underserved, urban, non-white communities.



## **Methods**

Exploratory semi-structured interviews were used to collect data for this study. Twenty-five semi-structured 10-15 minute in-person interviews were conducted at five sites over a two-week period in March 2019. Hagaman and Wutich (2016) recommended that 16 or fewer interviews are enough to identify common themes from sites with relatively homogenous groups but 20 to 40 interviews are needed to reach data saturation for metathemes that cut across all sites. Different subgroups of residents were targeted for the study, including African Americans and Latinos, as well as young, middle aged and elderly adults. Locations of the interviews included the Barbour Branch of the Hartford Public Library, the North End Senior Center located adjacent to Keney Park, the Upper Albany Branch of the Hartford Public Library, Community Health Services Inc., a Federally Qualified Health Center serving local residents, and the YMCA.

Eligible participants were residents of the North End of Hartford and 18 years of age or older. Potential respondents were excluded if they were non-residents and/or unwilling to participate in the interview. Potential participants were approached by the Principal Investigator, Andria Matthews, and screened for age and residential eligibility. At the conclusion of the interview, each participant was given a \$10 gift card to Dunkin Donuts. The study was approved and deemed exempt by UCONN Health's Internal Review Board.

The study was based on a convenience sample of interviewees that were available at each of the study sites. Participants were informed that their participation was voluntary and that they were able to skip any questions they felt uncomfortable answering. Completion of the interview signified their consent to participate in the study. No personal identifying information was gathered in order to protect the privacy of the subjects. Each interview was conducted using an

interview guide (see Appendix). Data were collected on paper forms and then transcribed into Word documents on a password protected laptop.

Five interviews were conducted at each of the five sites. Permission was obtained from each site prior to the day of interviews. An attempt was made to obtain permission to conduct interviews at the Parker Memorial Community Center, but emails and phone calls were not returned. At the North End Senior Center, interviews were conducted in a private office, and an employee of the Senior Center identified five seniors who would be willing to complete the interviews. At the other sites, the interviewer sat at a table near the entrance/lobby and asked individuals if they would be interested in participating in a 10 minute interview in exchange for a \$10 gift card. Very few individuals (N=3) declined to be interviewed.

The data were analyzed using qualitative research methods (Schensul, 1999). First, the data were transcribed by hand, then word document files were created for each research question. Responses for each research question were organized and counted using Excel. Responses were also analyzed to elicit common themes. Finally, illustrative quotes were compiled and the results summarized.

## Results

### Demographics

Twenty-five individuals completed the interview, five at each location. As shown in Table 1 below, more than half of the respondents (60%) were females.

**Table 1: Demographics of Respondents at Each Interview Site**

	Barbour Library	Albany Library	YMCA	Community Health Services	North End Senior Center	Total	% of sample (N=25)
<b>Gender</b>							
Male	1	2	4	2	1	10	40%
Female	4	3	1	3	4	15	60%
<b>Age</b>							
25-44	4	2	2	1		9	36%
45-64	1	3	2	3	3	12	48%
65+	0		1	1	2	4	16%
<b>Education</b>							
Some high school	1			1		2	8%
High School/GED	1	1	3	2	1	8	32%
Some college	2	4	2	2	2	12	48%
Associates Degree	1					1	4%
Bachelors					2	2	8%
<b>Race/Ethnicity</b>							
Black/African American	5	3	5	3	5	21	84%
Puerto Rican		1		1		2	8%
Jamaican		1				1	4%
White				1		1	4%

Thirty-six percent were age 25-44, 48% were 45-64, and 16% were 65 or older. Educational attainment was low among the respondents; 40% had only some high school education or had

their high school diploma, while 48% had completed some college. The majority of respondents identified as African American.

### **Familiarity with Integrative Medicine**

Few respondents were familiar with the term “Integrative Medicine.”

Six individuals reported that they had heard of Integrative Medicine, while 17 (68%) had never heard of it and two others (8%) reported “hearing it in passing” or being “somewhat” familiar with the term. Respondents familiar with the term Integrative Medicine had varying conceptions of what the term meant. They defined it variously as “mind cleansing,” “a different type of healing,” “health and wellness,” “yoga and all of that,” a “mix of regular medicine and alternative,” “treatment for health outside of conventional medicine,” a “combo of doctor recommendations and physical health,” “medication that doesn’t hurt, that doesn’t mess up other things,” and “helping revive the brain.”

Respondents were then asked whether they had heard of specific CAM and Integrative Medicine therapies including meditation and relaxation, herbal medicine, chiropractic, yoga, mindfulness, traditional healers and activities in nature, such as nature walks. Overall, familiarity with individual modalities was higher. Recognition was highest for massage (92%), meditation and relaxation (88%), and yoga (84%) (Table 2).

**Table 2: Familiarity with CAM/Integrative Medicine Modalities**

<b>CAM/Integrative Medicine Modality</b>	<b>% Familiar (n=25)</b>
Massage	92%
Meditation & Relaxation	88%
Yoga	84%
Chiropractic	76%
Activities in Nature	68%
Herbal Medicine	64%
Mindfulness	56%
Traditional Healers	48%

**CAM/Integrative Medicine Therapies Tried in the Past**

Massage therapy was the CAM/Integrative Medicine intervention that was most frequently reported by respondents (56%) followed by meditation, activities in nature and chiropractic (Table 3).

**Table 3: CAM/Integrative Medicine Therapies Tried in the Past**

<b>CAM/Integrative Medicine Modality</b>	<b>% Who Have Tried (n=25) Percent</b>
Massage	56%
Meditation	48%
Activities in Nature	48%
Chiropractic	48%
Herbal Medicine	44%
Yoga	36%
Traditional Healers	20%
Mindfulness	16%

Three respondents received massage therapy as a gift, during cancer therapy when offered by the hospital, and after an accident. Two respondents reported a history of regular use of massage; one currently goes once a month for “me” time and the other said he previously had a masseuse when he lived in Montreal, but could not afford it now. Two others reported getting massages at home by family members and/or partners. Generally, these respondents reported positive experiences with massage and reported that it “felt good,” “was relaxing,” “helped with pain” and induced sleep.

Twelve respondents reported participating in meditation and relaxation. Two respondents were introduced to meditation through school; others were introduced through their hospital during cancer treatment, through a program at a women’s shelter, through family members or through church. Three respondents participated in meditations that were religiously based, such

as meditating on scriptures or performing morning devotions. A mother of a child with ADHD reported using meditation with her child to help “with the flow of the house.” She was introduced to meditation by her cousin when she was having difficulty dealing with her son. Reported benefits of meditation included “feelings of relaxation,” “peace and calm,” “staying in the moment,” “clearing the mind,” “viewing things positively,” “easing stress” and “helping get ready for the day.” However, two respondents who had tried meditating on their own had found it difficult. One mother bought a book about meditation, but couldn’t find a quiet place with children at home, and felt that she needed a babysitter to help free her mind. Another respondent said she had a good experience when meditating in English class in order to clear her mind and focus before writing, but had less success when she tried it on her own at home.

Twelve respondents reported previous experience with chiropractic therapy, most following accidents and with insurance coverage. Many reported finding relief for back and neck pain, muscle spasms and muscle strain through chiropractic services. However, many reported ongoing pain stemming from their injuries. One respondent said that chiropractic services did not work for him.

Twelve respondents (48%) reported participating in activities in nature. Most reported taking walks or hikes, and one participated in biking. All reported positive experiences, including weight loss (2), “being able to focus on who you are with,” “being without electronics,” seeing plants and animals,” “recharging and cleansing the soul.” One woman reported that walking “gets [her] mind off people, places and things.” Many were introduced to hiking through a family member, friend, or through formal activities, such as through a church group. Many respondents traveled to nearby towns to participate in hiking, such as Avon, Berlin and

Simsbury. One person lamented that there weren't a lot of places to walk nearby. Another reported that she would like to hike more by herself, but doesn't know how.

Use of herbal medicine was reported by 11 respondents. Five reported using herbal teas. One gentleman reported that his "grandmother was Native American and introduced him to ginger root, maple and various barks." He felt that herbs and roots were "better than medication." Another respondent reported using plants and teas for "sickness, fevers, chicken pox and diarrhea" while she lived in Jamaica. She learned from older family members which herbs to use for certain illnesses. However, she has found it difficult to find the plants here. She feels that the teas here "don't taste the same or do what the natural plant would do." Another respondent had great success with weight loss using an herbal nutrition program. He reported a 42-pound weight loss, normalized blood pressure and more energy after using supplements, vitamins and protein shakes. He still continues to use these products because he feels you "can't build a house without painting it." Another respondent tried Herbalife supplements, but found that it made him nauseous. Vinegar was used by one respondent for weight loss and she reported it to be helpful. Finally, a man who had suffered a stroke found that cannabis helped him with improving function of his left hand.

Nine respondents reported trying yoga in the past. They were introduced to yoga through such places as a drug rehabilitation center, jail, in high school and college, at the gym or at home through videos and CDs. Most reported positive experiences with yoga, such as helping them "clear their mind," "relax," "stretch," "experience quietness" and alleviate "back pain," "stiffness" or "pulled muscles." One woman reported that due to arthritis she could not do yoga because it exacerbated her condition.



Traditional healers had been used by five respondents. Most experiences with traditional healing occurred outside of the mainland United States, in either Jamaica or Puerto Rico. A gentleman reported that growing up in Puerto Rico everyone used to go see a traditional healer for herbal medicines for the stomach and head before going to the doctor. In Jamaica, a woman would go to a traditional healer who would “pray for [her] and give [her] home remedies” which she found helpful. One respondent described himself as a traditional healer and uses “juices, vegetables and the timing of eating” to benefit his health. In contrast, one respondent reported a negative experience with traditional healing which “ripped [her] god from [her].”

Finally, four respondents reported using mindfulness techniques, including using mindfulness with a child with ADHD, “taking care of people,” “helping others,” “being present on a daily basis,” and “being mindful of things going on.”

## Interest in CAM/Integrative Medicine Modalities

**Table 4: Interest in CAM/Integrative Medicine Modalities**

<b>CAM/Integrative Medicine Modality</b>	<b>Interested (n=25) Percent</b>
Meditation	44%
Yoga	44%
Massage	32%
Herbal Medicine	24%
Activities in Nature	16%
Mindfulness	16%
Chiropractic	12%
Traditional Healers	4%

When asked about which modalities they would be interested in, meditation and relaxation and yoga were the most frequently requested offerings. Eleven people reported wanting to participate in meditation and relaxation for “learning how to relax” and “releasing pressure off mind and body.” One person said they had tried it in the past, but needed help getting back into it. One person also remarked that it was not currently available in the area.

Eleven respondents also had interest in yoga. One respondent wanted to use yoga to “lose weight,” while others felt it would help with “anxiety,” “depression,” “sleep disorder,” “relaxation” and “releasing pressure off mind and body.” One gentleman also shared that he would like to bring his “sister, mother and neighbors” to participate, as long as it was “nice and easy.” One respondent shared that she had wanted to try it in the past, but “felt intimidated by all

that bending.” Another said she was “not good at it, but that it was something good that you could do.” Finally, one respondent commented that yoga was not currently offered nearby.

Massage was requested by eight respondents. A respondent noted that massage would “make the body feel good” and another responded that he could no longer afford regular massage. Six people requested herbal medicine for reasons that included weight loss and “wanting to get back to where I was.” Those interested in herbal medicine liked the idea of using natural products, rather than medication. One woman remarked that she wanted to learn how to limit salty foods and use garlic to naturally lower her blood pressure. Four respondents were interested in activities in nature. One woman remarked that she was interested in “outdoor activities that include [her] kids.” Four respondents were also interested in mindfulness, particularly if it helped with “memory” function. One woman said that she had “heard about it from a lot of programs” and that encouraged her.

Chiropractic services were requested by three individuals and only one respondent was interested in traditional healers. A couple of respondents spontaneously talked about other services that they would be interested in. One individual expressed interest in “learning how to grow food,” and another woman requested a “Weight Watchers club.” One woman was interested in all of the possible services, as long as she could include her daughter.

### **Potential Barriers to CAM/Integrative Medicine Use**

Cost, transportation, time of day and day of week were all brought up as potential barriers to participation by respondents. Most respondents use the bus for transport and felt that it was important to site activities where they would be accessible by bus. A few respondents also noted

using Uber or Lyft in addition to the city bus. Only one respondent reported having access to a car. All the respondents interviewed at the North End Senior Center reported that they live near the Senior Center and would prefer activities that took place at or near the Center. These seniors also tended to prefer morning or daytime activities. The preferred time of day and day of week for other respondents varied greatly. Parents tended to prefer evenings and weekends. Others' preferred times varied depending on their work schedules, ranging from 6 am to as late as 9 pm.

One respondent who was interested in yoga classes said she wanted yoga offerings to be inclusive of different body types. She remarked, "I'd like to see persons more like me, my body type. I see very thin and lean people. It's intimidating! I don't want to be the only one in this frame. What I see on TV and advertised is very thin persons."

### **Medical Concerns Which Might Be Improved with CAM/Integrative Medicine**

When residents were asked whether they had medical problems or concerns that could be improved through CAM/Integrative Medicine, pain-related complaints were the most prevalent. Fourteen respondents expressed interest in therapies for pain, including back pain (5), pain stemming from arthritis (4) and pain in multiple areas (5) including shoulder, back, neck, arm and knee pain. At the present time, individuals reported using various methods for pain reduction, including pain medication, Tylenol, Flexeril (a muscle relaxant), massage and sleep, but without experiencing complete relief. One woman suffering from pain and weakness in her back and shoulder after an accident remarked "I try to suck up the pain, do what I gotta do." She felt that physical therapy could be helpful to her. Another woman suffering from arthritic pain remarked "My primary care is doing their best for me, but my feet feel heavy, hard to lift. I take Tylenol, it helps a little, but doesn't stop the pain completely."

Four respondents wanted help with losing weight and yoga and walking were mentioned as possible activities that could help with weight loss. One respondent remarked that she “[doesn’t] walk in the park because [she doesn’t] feel safe.” But, she would be comfortable walking in a group. Two respondents mentioned wanting help with relaxation. Other medical concerns included asthma, depression, sleep, Crohn’s disease, celiac disease, high blood pressure, carpal tunnel, gout, kidney disease, leg edema, self-esteem, memory/forgetfulness, anxiety, mindfulness, focus, staying positive, help for child with ADHD, detoxing, and cannabis to help with mobility after a stroke.

Although it was not explicitly asked as part of the interview, several participants expressed interest in being contacted after the interview to be notified when and where the CAM and Integrative Medicine services discussed in the interview would be available in the North End.

## **Discussion**

This research gives insight into the types of CAM and Integrative Medicine that might be of most interest to residents of North Hartford, and strategies for making these services inclusive and welcoming to residents. Although most respondents were not familiar with the term Integrative Medicine, many were familiar with specific CAM and IM therapies, especially massage, meditation and relaxation and yoga. This suggests that care should be taken when using terminology such as “Integrative Medicine” as it may not be understood widely. When publicizing activities, the names of specific therapies should be utilized, and more well-known therapies such as massage may be used to garner initial interest.

Nearly half of respondents reported past experience participating in activities in nature. A common theme that arose among several respondents included reservations about walking/hiking due to safety concerns or lack of appropriate skills. Providing group walks/hikes with education about using trails and basic wilderness safety, could help residents feel more comfortable engaging in activities in nature. It might also be advantageous to facilitate an informal walk buddy system where residents can find fellow community members to take walks with.

In terms of future interest, meditation and relaxation and yoga were the most popular requested offerings. While meditation and relaxation had been tried by nearly half of the respondents, several respondents reported issues with continuing to practice on their own. In offering meditation and relaxation, emphasis should be placed on providing a suitable place for meditation, such as a quiet meditation room, as well as support for parents with children, such as childcare, so that individuals can participate freely. In addition, instruction can focus on helping participants develop a home practice, so that they can successfully continue meditating beyond classes.

In terms of yoga, while interest was high in trying yoga, many respondents remarked on being intimidated by the perceived difficulty of the practice and the lack of diversity of body types in advertising for yoga. When offering yoga to this community, and others like it, emphasis should be placed on the accessibility of yoga, in terms of difficulty level and body acceptance. Advertising should feature individuals of diverse body types, and it may be advantageous to offer gentle yoga or beginner yoga classes that would be appropriate for novices.

Massage was also a highly requested therapy, but concerns about cost made frequent massage out of reach for some respondents. Offering low cost massage, potentially by partnering with a local massage school, could be a popular activity for this community.

Herbal medicine was requested by six respondents, most commonly for the purposes of weight loss. In addition, weight loss was also mentioned by 4 respondents when asked whether they had medical problems or concerns that could be improved through Integrative Medicine. CAM/Integrative Medicine interventions that can aid in weight management may be a promising potential offering for this community, especially in light of the high prevalence of obesity in this population.

This research also highlights the high prevalence of pain-related medical issues among residents of this community. In many cases, although conventional medical care was sought in the past by individuals, many did not experience adequate relief and are interested in CAM and Integrative Medicine therapies that can help reduce their pain, and reduce reliance on medication. In the face of the current opioid crisis, this may be a promising area for KPSP and other communities to pursue in terms of offering CAM and IM services.

In order to overcome barriers to participation, cost, transportation, time of day and day of week should all be addressed. First and foremost, low or no cost services would be most

accessible to this community. In addition, services should be offered in a location that is safe and accessible by bus, as this is the most common form of transportation used. In particular, seniors at the North End Senior Center would be most amenable to services offered at the existing Senior Center itself or nearby. Seniors were also more interested in morning and afternoon activities, while others were interested in early morning or evening activities that would be compatible with their work schedules.



## Conclusion

Specifically, research has not been undertaken to understand the attitudes of North Hartford residents toward CAM and Integrative Medicine. Before making a significant investment in creating the *Keney Park Wellness Center* research is best to understand whether community members would welcome and use the services of the *Wellness Center*. If Keney Park Sustainability Project has community support for the project, they can then work to obtain the necessary resources to make the project a reality. This study found that residents of North Hartford have an interest in CAM/Integrative Medicine, many have utilized it in the past, and there is a need for CAM/Integrative Medicine in this community that is safe, low cost and accessible.

Little research is available related to CAM and Integrative Medicine in minority and low-income communities. Other communities besides North Hartford are undoubtedly considering the use of Integrative Medicine to improve health outcomes and this research can help to fill the gap in the literature. For example, Integrative Medicine for the Underserved (IM4US), a nonprofit organization founded in 2009, is a multidisciplinary coalition committed to making affordable, accessible integrative health care available to everyone, especially underserved populations (IM4US, n.d.). This research project can potentially support the work of organizations like IM4US by strengthening the evidence base for their efforts. This research project serves the dual purposes of supporting a local, community based organization in improving health outcomes in a community in need, while also providing useful information for similar communities throughout the US to create their own CAM and Integrative Medicine interventions to improve health outcomes among low income, African American and Latino populations.

This research project was limited by its small sample size and the qualitative nature of the study. This sample was primarily Black/African American, with more representation from females than males. No one under the age of 25 participated in the study, and only four participants 65 and older participated. Future research in this community could focus on gathering data from Latinos, younger and older residents and males, as well as larger, more representative samples.

This research has provided insight into the attitudes of residents in the North End of Hartford toward Complementary, Alternative and Integrative Medicine, provides a snapshot of resident knowledge of CAM and Integrative Medicine, their interest in specific CAM and Integrative Medicine therapies, the types of medical concerns facing residents that CAM and Integrative Medicine could address and barriers to access that need to be addressed in any intervention.

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## **Appendix**

### **Interview Guide**

INTRODUCTION: I am conducting a survey regarding community attitudes toward Integrative Medicine in North Hartford, CT.

1. Would you be interested in participating?

If YES, continue to SCREENING QUESTIONS. If NO, thank individual for their time.

#### **SCREENING QUESTIONS:**

1. Do you live in the North End of Hartford? YES/NO
2. Are you 18 years or older? YES?NO

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If the answer to both of the above screening questions is YES, read the Survey Cover Memo to the interviewee prior to proceeding to INTERVIEW QUESTIONS.

If NO to either screening questions, let individual know that they are not eligible to participate in the survey and thank them for their time.

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#### **INTERVIEW QUESTIONS:**

1. Have you ever heard of the term Integrative Medicine? YES/NO (If NO, skip to question 3)
2. If YES, what does the term Integrative Medicine mean to you?



3. Keney Park is planning to offer new services, including Integrative medicine services such as:

Meditation and relaxation

Herbal medicine

Massage, Chiropractic

Yoga

Mindfulness

Traditional Healers

Activities in nature (such as nature walks)

4. Which of the above therapies do you recognize? (Circle All That Apply)
5. Have you participated in any of these therapies/activities? YES/NO (If NO skip to question 8)
6. If YES, which ones?
7. Did you like it? Was it helpful for you?

8. Are you interested in participating in any of these therapies in the future?

YES/NO (If NO skip to question 10)

9. If YES, Which ones?

10. If some of these therapies were offered at a Wellness Center in the North End of Hartford, what might prevent you from participating? (Examples include cost, time of day, location, schedule, transportation, other)

11. Do you have any medical problems or concerns that you think could be improved through Integrative Medicine?

12. What is your age?

13. What is your race/ethnicity?

14. How far did you go in school?

Thank you so much for completing this survey. You have earned a \$10 gift card!